

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1-12. (canceled)

13. (previously presented) A blood clot filter, comprising:

an apical head defining a central longitudinal axis; and

a plurality of elongated filter legs each having a proximal section and a distal section, each of said plurality of elongated filter legs formed at least in part of a shape-memory material actuatable between a radially collapsed configuration, a centering configuration, and a filtering configuration;

wherein the centering configuration of said plurality of elongated filter legs includes a bend region in the proximal section forming a pad configured to abut a vessel interior wall to center the filter when placed within a blood vessel;

wherein each of the bend regions of each of the elongated filter legs extends radially outward from the central longitudinal axis at equidistant intervals;

wherein the apical head is coupled to the proximal section of each of said plurality of elongated filter legs;

wherein each filter leg is configured to avoid contact with the vessel wall in the proximal section of the filter leg in the filtering configuration.

14. (original) The blood clot filter of claim 13, further comprising attachment means on the distal section of each filter leg for securing the blood clot filter to the blood vessel.

15. (original) The blood clot filter of claim 14, wherein said attachment means comprises a hook.

16. (original) The blood clot filter of claim 13, wherein said shape-memory material is superelastic.

17. (original) The blood clot filter of claim 16, wherein said shape-memory material comprises a nickel-titanium alloy.

18. (original) The blood clot filter of claim 13, wherein said shape-memory material is selected from the group consisting of silver-cadmium, gold-cadmium, gold-copper-zinc, copper-aluminum-nickel, copper-gold-zinc, copper-zinc, copper-zinc-aluminum, copper-zinc-tin, copper-zinc-silicon, iron-beryllium, iron-nickel-titanium-cobalt, iron-platinum, indium-thallium, iron-manganese, nickel-titanium-cobalt, or copper-tin.

19. (original) The blood clot filter of claim 13, wherein said shape-memory material is configured to transform from martensite to austenite at body temperature.

20. (original) The blood clot filter of claim 13, wherein said shape-memory material is configured to transform from martensite to austenite below body temperature.

21. (original) The blood clot filter of claim 13, wherein said shape-memory material is configured to transform from martensite to austenite above body temperature.

22. (original) The blood clot filter of claim 13, wherein said blood clot filter includes a lubricious coating.

23. (canceled)

24. (previously presented) A blood clot filter, comprising:
an apical head defining a central longitudinal axis; and

a plurality of filter legs each having a proximal section and a distal section, the distal section of said filter legs including attachment means configured to secure the blood clot filter at a first location along the wall of a blood vessel;

wherein each of said plurality of filter legs is formed at least in part of a shape-memory material actuatable between a radially collapsed configuration, a centering configuration, and a filtering configuration;

wherein the centering configuration of each filter leg includes a bend region in the proximal section forming a pad configured to abut the wall of the blood vessel at a second location spaced longitudinally apart from the first location to center the filter within the blood vessel;

wherein each of the bend regions of each of the filter legs extends radially outward from the central longitudinal axis at equidistant intervals;

wherein each filter leg is configured to avoid contact with the wall of the blood vessel in the proximal section of the filter leg in the filtering configuration.

25-30. (canceled)

31. (previously presented) The blood clot filter of claim 13, wherein the blood clot filter includes six filter legs, wherein the bend regions of the filter legs are arranged at equidistant 60 degree intervals.

32. (canceled)

33. (previously presented) The blood clot filter of claim 24, wherein the blood clot filter includes six filter legs, wherein the bend regions of the filter legs are arranged at equidistant 60 degree intervals.

34. (previously presented) The blood clot filter of claim 24, wherein the apical head is coupled to the proximal section of each of said plurality of filter legs.

35-36. (canceled)